

IN THE CLAIMS

Please amend the claims as follows:

Claims 1 through 28: (previously cancelled)

29. (Currently Amended) An open-end spin rotor for an open-end spinning textile machine, said rotor comprising:

a shaft having a free end portion at an axial bearing end of said shaft that is opposite from an open-end rotor end of said shaft, said free end portion further comprising a longitudinally extending projection and a first alignment surface defined at an annular end face of said projection in a plane generally transverse to a longitudinal axis of said shaft;

a support cap fitted onto said projection, said support cap further comprising an end defining an axial bearing surface of said spin rotor, said support cap comprising a first counter alignment surface disposed against said first alignment surface of said shaft free end portion; and

wherein by engagement of said first alignment and first counter alignment surfaces, said axial bearing surface is disposed in a defined plane generally transverse to a rotational axis of said shaft.

30. (Previously added) The open-end spin rotor as in claim 29, further comprising a second alignment surface defined on said shaft free end portion, and a second counter alignment surface on said support cap disposed against said second alignment surface.

31. (Previously added) The open-end spin rotor as in claim 30, wherein one of said first and second pairs of alignment and counter alignment surfaces are inclined at complimentary angles other than perpendicular to said rotational axis of said shaft.

32. (Previously added) The open-end spin rotor as in claim 31, wherein said support cap is coaxial to said shaft.

33. (Previously added) The open-end spin rotor as in claim 30, wherein said first and second alignment and counter alignment surfaces are disposed in planes generally perpendicular to said rotational axis of said shaft.

34. (Previously added) The open-end spin rotor as in claim 29, wherein said first alignment and counter alignment surfaces are disposed in a plane generally perpendicular to said rotational axis of said shaft.

35. (Previously added) The open-end spin rotor as in claim 29, wherein said first alignment and counter alignment surfaces are inclined at complimentary angles other than perpendicular to said rotational axis of said shaft.

36. (Previously added) The open-end spin rotor as in claim 35 wherein said complimentary angles are about 45 degrees with respect to a vertical claim.

37. (Previously added) The open-end spin rotor as in claim 35, wherein said support cap is coaxial to said shaft.

38. (Cancelled)

39. (Previously added) The open-end spin rotor as in claim 29, wherein said support cap comprises a recess defined in an end annular face thereof, said first counter alignment surface being a bottom surface of said recess.

40. (Previously added) The open-end spin rotor as in claim 29, wherein said support cap is formed of a ceramic material.

41. (Previously added) The open-end spin rotor as in claim 29, wherein said support cap is attached onto said projection with an adhesive material.

42. (Previously added) The open-end spin rotor as in claim 29, wherein said transverse angle of said axial bearing surface is perpendicular to said rotational axis of said shaft.

43. (Previously added) The open-end spin rotor as in claim 29, wherein said axial bearing surface is a crowned surface.

44. (Currently Amended) ~~The open-end spin rotor as in claim 29,~~ An open-end spin rotor for an open-end spinning textile machine, said rotor comprising:

a shaft having a free end portion, said free end portion further comprising a longitudinally extending projection and a first alignment surface defined in a plane generally transverse to a longitudinal axis of said shaft;

a support cap fitted onto said projection, said support cap further comprising an end defining an axial bearing surface of said spin rotor, said support cap comprising a first counter alignment surface disposed against said first alignment surface of said shaft free end portion;

wherein by engagement of said first alignment and first counter alignment surfaces, said axial bearing surface is disposed in a defined plane generally transverse to a rotational axis of said shaft; and

further comprising at least one air escape channel defined between said support cap and said projection, said air escape channel defined longitudinally along an area of said projection covered by said support cap.

45. (Previously added) The open-end spin rotor as in claim 44, wherein said air escape channel is a groove defined in along a portion of said projection covered by said support cap.

46. (Previously added) The open-end spin rotor as in claim 44, wherein said air escape channel is defined in a recess in said support cap, said projection fitted into said recess, said air escape channel defining an air passage from within said recess to the outside of said support cap.

47. (Previously added) The open-end spin rotor as in claim 46, further comprising a plurality of said air escape channels defined around a circumference of said recess.

48. (Currently amended) ~~The open-end spin rotor as in claim 29,~~ An open-end spin rotor for an open-end spinning textile machine, said rotor comprising:
a shaft having a free end portion, said free end portion further comprising a longitudinally extending projection and a first alignment surface defined in a plane generally transverse to a longitudinal axis of said shaft;
a support cap fitted onto said projection, said support cap further comprising an end defining an axial bearing surface of said spin rotor, said support cap comprising a first counter alignment surface disposed against said first alignment surface of said shaft free end portion;

wherein by engagement of said first alignment and first counter alignment surfaces, said axial bearing surface is disposed in a defined plane generally transverse to a rotational axis of said shaft; and

further comprising at least one air escape channel defined in a recess in said support cap, said projection fitted into said recess, said air escape channel defined by an axial bore through a bottom surface of said recess.

49. (Currently amended) A support cap configured for attachment onto a projection extending from an end portion of an open-end spin rotor shaft, said support cap comprising an axial bearing surface at one end and a recess defined in an opposite end into which the shaft projection extends, said support cap further comprising a counter alignment surface disposed to contact against an annular end face alignment surface of the shaft free end portion in order to align said support cap such that said axial bearing surface is maintained at a desired angle with respect to a rotational axis of the shaft.

50. (Previously added) The support cap as in claim 49, wherein said support is formed of a ceramic material.

51. (Previously added) The support cap as in claim 49, further comprising a second counter alignment surface disposed to contact against a second alignment surface of the free end portion of the shaft.

52. (Previously added) The support cap as in claim 49, wherein said counter alignment surface is disposed in a plane generally perpendicular to a rotational axis of said support cap.

53. (Previously added) The support cap as in claim 51, wherein at least one of said counter alignment surfaces is disposed in a slanted plane other than perpendicular with respect to a rotational axis of said support cap.

54. (Previously added) The support cap as in claim 49, wherein said counter alignment surface is disposed in a slanted plane other than perpendicular with respect to a rotational axis of said support cap.

55. (Currently amended) ~~The support cap as in claim 49,~~ A support cap configured for attachment onto a projection extending from an end portion of an open-end spin rotor shaft, said support cap comprising an axial bearing surface at one end and a recess defined in an opposite end into which the shaft projection extends, said support cap further comprising a counter alignment surface disposed to contact against an alignment surface of the shaft free end portion in order to align said support cap such that said axial bearing surface is maintained at a desired angle with respect to a rotational axis of the shaft, said support cap further comprising at least one air escape channel defined longitudinally along said recess to define a passage for air to exit said recess upon fitting said support cap onto the shaft projection.

56. (Previously added) The support cap as in claim 55, further comprising a plurality of said air escape channels defined around a circumference of said recess.